

Patent
702015.5IN THE CLAIMS:

Please amend claim 18 as follows:

1. (Allowed) A process of preparing membrane vesicles from the culture supernatant of a biological sample, wherein said biological sample comprises membrane vesicles produced by antigen presenting cells that have been sensitized to one or more selected antigens, said method comprising at least

a filtration of the culture supernatant, followed by a tangential ultrafiltration to produce a biological sample enriched with membrane vesicles;

an anion exchange chromatography treatment performed under pressure of the enriched sample followed or preceded by gel permeation chromatography of said enriched sample; and

a sterilising filtration step.

2. (Allowed) Process according to claim 1, wherein said anion exchange chromatography is performed on a support functionalised with a quaternary amine.

3. (Cancelled)

4. (Allowed) Process according to claim 1, wherein the biological sample is selected from a biological fluid, a culture supernatant, a cell lysate and a pre-purified solution.

5. (Allowed) A process of preparing membrane vesicles from a biological sample, wherein said process comprises at least:

DOCSOC1:156876.1
702015-5 K2M

Patent
702015.5

- a) the culture of a population of membrane vesicles producing antigen presenting cells under conditions enabling the release of vesicles, wherein said antigen presenting cells have been sensitized to one or more selected antigens,
- b) a filtration of the culture supernatant of the cells, followed by a tangential ultrafiltration to prepare a sample enriched with membrane vesicles,
- c) an anion exchange chromatography treatment performed under pressure and a gel permeation chromatography treatment of the sample, and
- d) a sterilising filtration step of the sample.
6. (Cancelled).
7. (Allowed) Process according to claim 5, wherein the enrichment step also comprises a clarification stage.
8. (Allowed) Process according to claim 5, wherein the enrichment step comprises an affinity chromatography step.
9. (Allowed) Process according to claim 5, characterised in that the enrichment step comprises a centrifugation step realized at a speed below 1000g or a filtration.
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Allowed) Process according to claim 1, wherein the membrane vesicles have a diameter between approximately 60 and 90 nm.

Patent
702015.5

14. (Allowed) Process according to claim 1, wherein the antigen presenting cells comprise dendritic cells, B lymphocytes, macrophages or mastocytes.

15. (Allowed) Process according to claim 5, characterised in that the membrane vesicles are vesicles produced by human dendritic cells.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) A process of preparing membrane vesicles, characterised in that it comprises the following steps:

- a) obtaining a population of immature dendritic cells sensitized to one or more selected antigens,
- b) culturing the dendritic cells under conditions enabling the production of membrane vesicles,
- c) treating the culture supernatant of said cells to produce a biological sample enriched with membrane vesicles by a filtration of the culture supernatant followed by a tangential ultrafiltration,
- d) purifying the membrane vesicles using a process comprising at least an anion exchange chromatography treatment performed under pressure and a gel permeation chromatography of the sample, and,
- e) a sterilising filtration step of the sample.

Patent
702015.5

19. (Allowed) Process according to claim 18, characterised in that the dendritic cells are obtained from a biological sample from a subject.

20. (Cancelled)

21. (Cancelled)

22. (Allowed) Process according to claim 18, characterised in that during step b), the dendritic cells are cultured under conditions stimulating membrane vesicle production.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Allowed) Process of preparing membrane vesicles from a biological sample, characterised in that it comprises:

- a) the culture of a population of membrane vesicle producing tumoral cells under conditions enabling the release of vesicles,
 - b) a membrane vesicle enrichment step comprising a filtration followed by a tangential ultrafiltration,
 - c) an anion exchange chromatography treatment performed under pressure and a gel permeation chromatography treatment of the sample, and
 - d) a sterilising filtration step of the sample.
27. (Allowed) Process according to claim 26, wherein the tumoral cells are human tumoral cells.

DOCSOC1:156876.1
702015-5 K2M